## 12-4280: Phospho-PLK1 (Thr210) (Clone: C2) rabbit mAb APC conjugate

| Clonality : | Monoclonal |
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| Clone Name: | PLK1T210-C2 |
| Application : | FACS |
| Reactivity : | Human |
| Conjugate : | APC |
| Format: | Conjugated |
| Alternative Name : | Serine/threonine-protein kinase PLK1, Polo-like kinase 1, Serine/threonine-protein kinase 13, <br> STPK13 |
| Isotype : | Rabbit IgG1k |
| Immunogen Information $:$ | A synthetic phospho-peptide corresponding to residues surrounding Thr210 of human |
| phospho PLK1 |  |

## Description

PLK1 is activated by phosphorylation of Thr210 in its activation loop. When dephosphorylated, PLK1 auto-inhibition occurs when the Polo-box domain (PDB) binds (and thus inhibits) the kinase domain. PLK1 phosphorylation is directly linked to the cell cycle, as phosphorylation occurs during mitosis but not during interphase. PLK1 is required for successful progression through the mitotic phase. Aurora A phosphorylates PLK1, with the G2-induced Bora protein directly interacting with PLK1 to relieve auto-inhibition. Small-molecule PLK1 inhibitors have played an important role in elucidating PLK1's activities in the cell and have demonstrated the potential of PLK1 as an anti-cancer target. PLK1 inhibition is an efficient cell killer.

## Product Info

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Amount: 10 Tests / 100 Tests
Content : 1X PBS, 0.09% NaN3, 0.2% BSA
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Storage condition : $\quad$ Store at $2-8^{\circ} \mathrm{C}$. Avoid repeated freeze and thaw cycles.

## Application Note

For flow cytometric staining, the suggested use of this reagent is $5 \tilde{A} \square \hat{A} \mu \mathrm{~L}$ per million cells or $5 \tilde{A} \square \hat{A} \mu \mathrm{~L}$ per $100 \tilde{A} \square \hat{A} \mu \mathrm{~L}$ of staining volume. It is recommended that the reagent be titrated for optimal performance for each application.


Fig-1: Flow cytometric analysis of HeLa cells, untreated and unstained as negative control (blue) or untreated and stained (red) or treated with nocodazole and stained (green) using Phospho-PLK1 (Thr210) antibody PLK1T210-C2 APC conjugate.

